

ABSTRACT OF THE DISCLOSURE

A method of providing acceleration support to a combustion engine using an integrated starter/alternator. The integrated starter/alternator is in rotational combination with the crankshaft and connected to a battery system. The integrated starter/alternator is adapted to function at times as a power source adding torque to rotate the crankshaft to overcome friction and non-linear hydrodynamic forces within the engine. At other times the integrated starter/alternator functions as a power generator for subtracting torque from the crankshaft to provide electrical current to the battery system.